

PTO/SB/21 (08-03)

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TRANSMITTAL FORM (to be used for all correspondence after initial filing)		Application Number	10/722,849
		Filing Date	November 26, 2003
		First Named Inventor	Jing MA
		Art Unit	1614
		Examiner Name	Not Yet Assigned
Total Number of Pages in This Submission	12 + 50 Refs.	Attorney Docket Number	549062000100

ENCLOSURES (Check all that apply)

<input type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment/Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input checked="" type="checkbox"/> Information Disclosure Statement (3 pages) <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): 1. Form PTO-1449 (4 pages in duplicate) 2. References (50) 3. Return receipt postcard
Remarks		

SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	MORRISON & FOERSTER LLP Jie Zhou - 52,395	(Customer No. 25226)
Signature		
Date	April 12, 2004	

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(Martina Placid)



PATENT
Docket No. 549062000100

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Martina Placid

Martina Placid

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of:

Jing MA et al.

Serial No.: 10/722,849

Filing Date: November 26, 2003

For: ANTIBODIES SPECIFIC FOR CANCER
ASSOCIATED ANTIGEN SM5-1 AND
USES THEREOF

Examiner: Not Yet Assigned

Group Art Unit: 1614

INFORMATION DISCLOSURE
STATEMENT UNDER 37 C.F.R. § 1.97 & 1.98

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Dear Sir:

Pursuant to 37 C.F.R. § 1.97 and § 1.98, Applicant submits for consideration in the above-identified application the documents listed on the attached Form PTO-1449. Pursuant to the USPTO notice dated July 11, 2003, waiving the requirement under 37 C.F.R. § 1.98 (a)(2)(i) to provide copies of U.S. Patents and U.S. Published Applications, copies of those references are

not submitted. Copies of foreign documents and non-patent literature are submitted herewith. Applicants bring to the attention of the Examiner a co-pending related application (document 1 on the attached form PTO-1449) which copy is not being submitted herewith. The Examiner is requested to make these documents of record.

This Information Disclosure Statement is submitted:

- ☐ With the application; accordingly, no fee or separate requirements are required.
- ☐ Before the mailing of a first Office Action after the filing of a Request for Continued Examination under § 1.114. However, if applicable, a certification under 37 C.F.R. § 1.97(e)(1) has been provided.
- ☒ Within three months of the application filing date or before mailing of a first Office Action on the merits; accordingly, no fee or separate requirements are required. However, if applicable, a certification under 37 C.F.R. § 1.97(e)(1) has been provided.
- ☐ After receipt of a first Office Action on the merits but before mailing of a final Office Action or Notice of Allowance.
 - ☐ A fee is required. A check in the amount of __ is enclosed.
 - ☐ A fee is required. Accordingly, a Fee Transmittal form (PTO/SB/17) is attached to this submission in duplicate.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided above; accordingly; no fee is believed to be due.
- ☐ After mailing of a final Office Action or Notice of Allowance, but before payment of the issue fee.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided above and a check in the amount of __ is enclosed.
 - ☐ A Certification under 37 C.F.R. § 1.97(e) is provided above and a Fee Transmittal form (PTO/SB/17 is attached to this submission in duplicate.)


Applicant would appreciate the Examiner initialing and returning the Form PTO-1449, indicating that the information has been considered and made of record herein.

The information contained in this Information Disclosure Statement under 37 C.F.R. § 1.97 and § 1.98 is not to be construed as a representation that: (i) a complete search has been made; (ii) additional information material to the examination of this application does not exist; (iii) the information, protocols, results and the like reported by third parties are accurate or enabling; or (iv) the above information constitutes prior art to the subject invention.

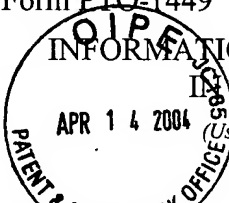
In the unlikely event that the transmittal form is separated from this document and the Patent Office determines that an extension and/or other relief (such as payment of a fee under 37 C.F.R. §1.17(p)) is required, Applicant petitions for any required relief including extensions of time and authorizes the Commissioner to charge the cost of such petitions and/or other fees due in connection with the filing of this document to Deposit Account No. 03-1952 referencing 549062000100. However, the Commissioner is not authorized to charge the cost of the issue fee to the Deposit Account.

Dated: April 12, 2004

Respectfully submitted,

By: 
Jie Zhou
Registration No. 52,395

Morrison & Foerster LLP
755 Page Mill Road
Palo Alto, California 94304-1018
Telephone: (650) 813-5922
Facsimile: (650) 494-0792

Form PTO-1449  INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)	Docket Number 549062000100	Application Number 10/722,849
	Applicant Jing MA	
	Filing Date November 26, 2003	Group Art Unit: 1614
	Mailing Date April 12, 2004	

U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate
	1.	12/01/1999	09/451,353	Ma			
	2.	08/01/2002	2002/0102278	Guo			
	3.	07/28/1987	4,683,195	Mullis et al.			
	4.	07/28/1987	4,683,202	Mullis			
	5.	03/22/1988	4,732,864	Tolman			
	6.	06/28/1988	4,754,065	Levenson et al.			
	7.	01/24/1989	4,800,159	Mullis et al.			
	8.	03/28/1989	4,816,567	Cabilly et al.			
	9.	12/04/1990	4,975,278	Senter et al.			
	10.	09/03/1996	5,552,391	Coutts et al.			
	11.	10/15/1996	5,565,332	Hoogenboom et al.			
	12.	12/03/1996	5,580,717	Dower et al.			
	13.	03/31/1998	5,733,743	Johnson et al.			
	14.	09/15/1998	5,807,715	Morrison et al.			
	15.	02/02/1999	5,866,692	Shitara et al.			
	16.	12/07/1999	5,997,867	Waldmann et al.			
	17.	04/25/2000	6,054,297	Carter et al.			
	18.	01/30/2001	6,180,377	Morgan et al.			
	19.	04/03/2001	6,210,671	Co			
	20.	07/24/2001	6,265,150	Terstappen et al.			
	21.	12/18/2001	6,331,415	Cabilly et al.			
	22.	02/26/2002	6,350,861	Co et al			
	23.	08/27/2002	6,441,163	Chari et al.			

FOREIGN PATENT DOCUMENTS

Examiner	Ref.	Date	Document No.	Country	Class	Subclass	Translation
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EXAMINER:

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	Mailing Date April 12, 2004	

Initials	No.						YES	NO
	24.	12/23/1992	EP 519,596	Europe				
	25.	04/30/1981	WO 81/01145	WIPO				
	26.	10/06/1988	WO 88/07378	WIPO				
	27.	04/01/1993	WO 93/06213	WIPO				
	28.	04/19/2001	WO 01/27160	WIPO				

OTHER DOCUMENTS

(including author, title, Date, Pertinent Pages, Etc.)

Examiner Initials	Ref. No.	Title
	29.	Al-Lazikani, B. et al. (1997). "Standard Conformations for the Canonical Structures of Immunoglobulins," <i>J. Molec. Biol.</i> 273(4):927-948.
	30.	Brown, B. A. et al. (1987). "Tumor-Specific Genetically Engineered Murine/Human Chimeric Monoclonal Antibody," <i>Cancer Res.</i> 47:3577-3583.
	31.	Chothia, C. et al. (1989). "Conformations of Immunoglobulin Hypervariable Regions," <i>Nature</i> 342(6252):877-883.
	32.	Clackson, T. et al. (1991). "Making Antibody Fragments Using Phage Display Libraries," <i>Nature</i> 352(6336):624-628.
	33.	Dai, J. et al. (2003). "Monoclonal Antibody SM5-1 Can Inhibit Tumor Cells' Growth and Induce Caspase-10 Related Apoptosis," <i>Clinical Cancer Research</i> 9(C13):6206S-6207S.
	34.	Daugherty, B.L. et al. (1991). "Polymerase Chain Reaction Facilitates the Cloning, CDR-Grafting, and Rapid Expression of a Murine Monoclonal Antibody Directed Against the CD18 Component of Leukocyte Integrins," <i>Nucl. Acids Res.</i> 19(9):2471-2476.
	35.	Dayoff, M. O. et al. (1978). "A Model of Evolutionary Change in Proteins," Chapter 22 <i>In Atlas of Protein Sequence and Structure</i> . The National Biomedical Research Foundation 5(3):345-352.
	36.	Griffiths, A.D. et al. (1993). "Human Anti-Self Antibodies with High Specificity From Phage Display Libraries," <i>EMBO J.</i> 12(2):725-734.
	37.	Griffiths, A.D. et al. (1994). "Isolation of High Affinity Human Antibodies Directly From Large Synthetic Repertoires," <i>EMBO J.</i> 13(14):3245-3260.
	38.	Guo, Y. et al. (1994). "Inhibition of Human Melanoma Growth and Metastasis <i>In Vivo</i> by Anti-CD44 Monoclonal Antibody," <i>Cancer Res.</i> 54(6):1561-1565.
	39.	Haidaris, C.G. et al. (2001). "Recombinant Human Antibody Single Chain Variable Fragments Reactive with <i>Candida Albicans</i> Surface Antigens," <i>J. Immunol. Methods</i> 257(1-2):185-202.
	40.	Hein, J. (1990). "Unified Approach to Alignment and Phylogenies," <i>Methods in Enzymology</i> 183:626-644.

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41.	Higgins, D.G. et al. (1989). "Fast and Sensitive Multiple Sequence Alignments on a Microcomputer," <i>CABIOS Communications</i> 5(2):151-153.
42.	Hirt, B. (1967). "Selective Extraction of Polyoma DNA from Infected Mouse Cell Cultures," <i>J. Mol. Biol.</i> 26:365-369.
43.	Hoogenboom, H. R. et al. (1992). "By-Passing Immunisation Human Antibodies from Synthetic Repertoires of Germline V _H Gene Segments Rearranged <i>In Vitro</i> ," <i>J. Mol. Biol.</i> 227:381-388.
44.	Irie, R.F. et al. (1986). "Regression of Cutaneous Metastatic Melanoma by Intralesional Injection with Human Monoclonal Antibody to Ganglioside GD2," <i>PNAS USA</i> 83(22):8694-8698.
45.	Johnson, K. D. et al. (1993). "Human Antibody Engineering," <i>Current Opinion in Structural Biology</i> 3(4):564-571.
46.	Jones, P.T. et al. (1986). "Replacing the Complementarity-Determining Regions In A Human Antibody with Those From a Mouse," <i>Nature</i> 321:522-525.
47.	Karlsson, et al. (1991). "Kinetic Analysis of Monoclonal Antigen-Interactions With A New Biosensor Based Analytical System," <i>J. Immunol. Methods</i> 145:229-240.
48.	Kindblom, L-G. et al. (1984). "S-100 Protein in Melanocytic Tumors," <i>Acta. Pathol. Microbial Immunol. Scand</i> 92:219-230.
49.	Köhler, G. et al. (1975). "Continuous Cultures on Fused Cells Secreting Antibody of Predefined Specificity," <i>Nature</i> 256:495-497.
50.	Lobuglio, A.F. et al. (1989). "Mouse/Human Chimeric Monoclonal Antibody in Man: Kinetics and Immune Response," <i>PNAS USA</i> 86:4220-4224.
51.	Mahato, E.I. et al. (1997). "Cationic Lipid-Based Gene Delivery Systems: Pharmaceutical Perspectives," <i>Pharm. Res.</i> 14(7):853-859.
52.	Marken, J.S. et al. (1992). "Cloning and Expression of the Tumor-Associated Antigen L6," <i>PNAS USA</i> 89:3503-3507.
53.	Marks, J.D. et al. (1991). "By-Passing Immunization Human Antibodies From V-Gene Libraries Displayed on Phage," <i>J. Mol. Biol.</i> 222(3):581-597.
54.	Marks, J.D. et al. (1992). "By-Passing Immunization: Building High Affinity Human Antibodies by Chain Shuffling," <i>BioTechnol.</i> 10(7):779-783.
55.	McCafferty, J. et al. (1990). "Phage Antibodies: Filamentous Phage Displaying Antibody Variable Domains," <i>Nature</i> 348(6301):552-554.
56.	Myers, E.W. et al. (1988). "Optimal Alignments in Linear Space," <i>CABIOS</i> 4(1):11-17.
57.	Nakajima, T. et al. (1982). "Immunohistochemical Demonstration of S100 Protein in Malignant Melanoma and Pigmented Nevus, and its Diagnostic Application," <i>Cancer</i> 50:912-918.
58.	Nissim, A. et al. (1994). "Antibody Fragments From 'Single Pot' Phage Display Library As Immunochemical Reagents," <i>EMBO J.</i> 13:692-698.

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59.	Ordóñez, N.G. et al. (1988). "Comparison of HMB-45 Monoclonal Antibody and S-100 Protein in the Immunohistochemical Diagnosis of Melanoma," <i>Am. J. Clin. Pathol.</i> 90:385-390.
60.	Riechmann, L. et al. (1988). "Reshaping Human Antibodies For Therapy," <i>Nature</i> 332(6162):323-327.
61.	Robinson, E.D. (1971). "Comparison of Labeled Trees With Valency Three," <i>J. Comb. Theor.</i> 11:105-119.
62.	Saitou, N. et al. (1987). "The Neighbor-Joining Method: A New Method for Reconstructing Phylogenetic Trees," <i>Mol. Biol. Evol.</i> 4(4):406-425.
63.	Shaw, D.R. et al. (1987). "Characterization of a Mouse/Human Chimeric Monoclonal Antibody (17-1A) to a Colon Cancer Tumor-Associated Antigen," <i>J. Immuno.</i> 138(12):4534-4538.
64.	Smoller, B.R. et al. (1989). "HMB-45 Recognizes Stimulated Melanocytes," <i>J. Cutan. Pathol.</i> 16:49-53.
65.	Smoller, B.R. et al. (1989). "HMB-45 Staining of Dysplastic Nevi: Support for a Spectrum of Progression Toward Melanoma," <i>Am J. Surg Pathol.</i> 13(8):680-684.
66.	Smoller, B.R. (1994). "Immunohistochemistry in the Diagnosis of Melanocytic Neoplasms," <i>Pathology: State of the Art Reviews</i> 2(2):371-383.
67.	Verhoeven, M. et al. (1988). "Reshaping Human Antibodies: Grafting An Antilysozyme Activity," <i>Science</i> 239(4835):1534-1536.
68.	Waterhouse, P. et al (1993). "Combinatorial Infection and <i>In Vivo</i> Recombination: A Strategy for Making Large Phage Antibody Repertoires," <i>Nucl. Acids Res.</i> 21(9):2265-2266.
69.	Wick, M.R. et al. (1988). "Recognition of Malignant Melanoma By Monoclonal Antibody HMB-45. An Immunohistochemical Study of 200 Paraffin-Embedded Cutaneous Tumors," <i>J. Cutan Pathol.</i> 15(4):201-207.
70.	Wilber, W.J. et al. (1983). "Rapid Similarity Searches of Nucleic Acid and Protein Data Banks," <i>PNAS USA</i> 80:726-730.
71.	Winter, G. et al. (1991). "Man-Made Antibodies," <i>Nature</i> 349(6307):293-299.
72.	Winter, G. et al. (1994). "Making Antibodies By Phage Display Technology," <i>Annu. Rev. Immunol.</i> 12:433-455.
73.	Yang, L-J. et al. (2002). "Preparation of Monoclonal Antibody Against Apoptosis-Associated Antigens of Hepatoma Cells by Subtractive Immunization," <i>World J. Gastroenterol.</i> 8(5):808-814.

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